Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A computer-implemented method of integrating software systems comprising:

identifying, by a processor of the computer, a scope of the integration based on a multi-level top-down approach;

identifying, by the processor, faults in business rules that define software in the scope of the integration by applying generic depth-first search (DFS)-based techniques to the business rules; and

modifying, by the processor, the business rules based on the identified faults.

2. (previously presented) The computer-implemented method of claim 1, where identifying faults in the business rules includes:

representing the business rules using a transition-directed graph (TDG) representation.

3. (previously presented) The computer-implemented method of claim 1, where the multi-level top-down approach includes:

a first level that includes high-level software systems.

4. (previously presented) The computer-implemented method of claim 3, where the multi-level top-down approach further includes:

a second level that includes business processes of the high-level software systems.

5. (previously presented) The computer-implemented method of claim 4, where the multi-level top-down approach further includes:

a third level that includes business rules that are defined as transitions in the business processes;

a fourth level that includes interface functions that define communications between the business rules; and

a fifth level that includes data used by the business rules and the interface functions.

6. (previously presented) The computer-implemented method of claim 4, further including:

comparing the business processes to locate similar business processes that are to be integrated.

7. (previously presented) The computer-implemented method of claim 1, where identifying the scope of the integration is performed on software systems from multiple merging entities.

8. (previously presented) The computer-implemented method of claim 1, where the identified faults include faults of at least one of inconsistency, contradiction, circularity, subsumption, redundancy, or incompleteness.

9. (previously presented) A computer-implemented system for integrating information distribution systems comprising:

a memory to store instructions; and

a processor to execute the instructions to implement:

means for assisting a user to identify a scope of the integration using a multi-level top-down approach, the identified scope including a set of business processes that are to be integrated and a set of business rules that define the business processes; and

means for identifying faults in the business rules by applying generic depth-first search (DFS)-based techniques to the business rules.

10. (previously presented) The computer-implemented system of claim 9, where the fault detection component is further configured to represent the business rules using a transition-directed graph (TDG) representation.

11. (previously presented) The computer-implemented system of claim 9, where the multi-level top-down approach includes:

a first level that includes high-level software systems.

12. (previously presented) The computer-implemented system of claim 11, where the multi-level top-down approach further includes:

a second level that includes the business processes, which define the high-level software systems.

13. (previously presented) The computer-implemented system of claim 12, where the multi-level top-down approach further includes:

a third level that includes the business rules defined as transitions in the business processes;

a fourth level that includes interface functions that define communications between the business rules; and

a fifth level that includes data used by the business rules and the interface functions.

14. (previously presented) The computer-implemented system of claim 12, where the means for assisting compares the business processes to locate similar business processes that are to be integrated.

15. (previously presented) The computer-implemented system of claim 9, where the scope of the integration is defined for software systems from multiple merging entities.

16. (previously presented) The computer-implemented system of claim 9, where the identified faults include faults of at least one of inconsistency, contradiction, circularity, subsumption, redundancy, or incompleteness.

17. (currently amended) A computer-implemented method of integrating information distribution systems of merging entities, the method comprising:

identifying, by a processor of the computer, top-level software systems that are to be integrated;

identifying, by the processor, business processes in the top-level software systems;

comparing, by the processor, the identified business processes to determine business processes that are related as candidates for integration;

identifying, by the processor, business rules that define the business processes; and

identifying, by the processor, faults in the business rules by applying generic depth-first search (DFS)-based techniques to the business rules.

18. (previously presented) The computer-implemented method of claim 17, further comprising:

modifying the business rules based on the identified faults.

19. (previously presented) The computer-implemented method of claim 17, where comparing the identified business processes includes finding pairs of business processes that perform similar functions.

20. (previously presented) The computer-implemented method of claim 17, where the identified faults include faults of at least one of inconsistency, contradiction, circularity, subsumption, redundancy, or incompleteness.

21. (previously presented) The computer-implemented method of claim 17, where identifying faults in the business rules further includes:

representing the business rules using a transition-directed graph (TDG) representation.

22. (currently amended) A computer-readable memory device containing instructions for execution by one or more processors, the computer-readable memory device ~~medium~~ including:

instructions for assisting a user to identify a scope of an integration of information distribution systems by using a multi-level top-down approach, the identified scope including a set of business processes that are to be integrated and a set of business rules that define the business processes; and

instructions for identifying faults in the business rules by applying generic depth-first search (DFS)-based techniques to the business rules.

23. (previously presented) The computer-readable memory device of claim 22, where the instructions for identifying faults represent the business rules using a transition-directed graph (TDG) representation.

24. (previously presented) The computer-readable memory device of claim 22, where the multi-level top-down approach includes:

a first level that includes high-level software systems.

25. (previously presented) The computer-readable memory device of claim 24, where the multi-level top-down approach includes:

a second level that includes the business processes, which define the high-level software systems.

26. (previously presented) The computer-readable memory device of claim 25, where the multi-level top-down approach includes:

a third level that includes the business rules defined as transitions in the business processes;

a fourth level that includes interface functions that define communications between the business rules; and

a fifth level that includes data used by the business rules and the interface functions.

27. (previously presented) The computer-readable memory device of claim 22, where the scope of the integration is defined for information distribution systems from multiple merging entities.

28. (previously presented) The computer-readable memory device of claim 22, where the identified faults include faults of at least one of inconsistency, contradiction, circularity, subsumption, or incompleteness.